



THE INSTITUTION OF ENGINEERS, MALAYSIA

Bangunan Ingenieur, Lot 60/62, Jalan 52/4 Peti Surat 223. 46720 Petaling Jaya, Selangor Darul Ehsan
Tel: 603-7968 4001/2 Fax: 603-7957 7678 E-mail : sec@iem.org.my IEM Homepage : http://www.myiem.org.my

EVENING TALK ON THE ISSUES AND CHALLENGES OF MALAYSIA'S POWER/ENERGY NEEDS FOR THE ELECTRICITY SECTOR POST-2020

(Organised by the Electrical Engineering Technical Division, IEM)
BEM Approved CPD/PDP Hours: 2 Ref No : IEM15/HQ/257/T

Date : 29th July 2015
Time : 5.30 pm– 7.30 pm
(Refreshment will served in 2nd Flr at 5.00pm)
Venue : C&S & TUS Lecture Room, 2nd Floor, Wisma IEM
Speaker : Dr. Amir Basha Ismail

SYPNOSIS

The Talk will focus on four major strategic challenges that need to be addressed by energy policy planners in formulating the Nation's energy security agenda towards ensuring reliable, clean and sustainable electricity supply requirements post-2020 planning horizon (up to 2050).

The Four Strategic challenges that will be deliberated are:

Challenge No.1 : Growing Electricity Demand-Generation Supply Requirement

This will include the projected electricity demand forecast and the necessary generation expansion simulation study to secure the reliability level (operating reserve margin/loss of load probability of 1 day/year) to meet peak power capacity demand (MW) and energy demand (GWh) for each year of the planning horizon years.

Challenge No. 2: Fuel Security viz-a-viz Existing National Energy Policies

will address on (a) resource accessibility of indigenous gas supply (b) Gas Pricing Policy/Acceptance of Price Risk, and ©Resource Accessibility and Pricing Risk of Coal

Challenge No.3: Carbon Emission and Climate Change

This will be discussed in relation to Challenge No.1 in terms of fuel-type power plants that will Be optimized/selected by the Generation Expansion Simulation Study with different scenarios of fuel-type power plant candidates.

Challenge No. 4: The Nuclear Option

This will be discussed in the context of the Government Economic Transformation Program (ETP) – A Road Map for Powering the Economy with Oil, Gas and Energy. In this, the Government has taken a national stand with respect to Nuclear Energy option in diversifying the fuel mix for electricity generation, besides coal and gas. This. will also be elaborated in relation to the WASP Generation Expansion Simulation Plan Scenario Study and the levelized Cost of Electricity (LCOE) Comparing Coal, Gas and Nuclear fuel option.

Finally, the Talk will conclude with the proposed way forward in addressing the national energy security agenda for electricity demand-generation balance in terms of fuel policy mix and diversification.

BIODATA OF SPEAKER

Ir. Dr Amir Basha Ismail served LLN/TNB for 33 years (1974-2007). He was one of those several local pioneer engineers who were involved in the planning, design and operation of the 500kV/275kV/132kV National Power System Grid (1979-1993), holding positions of senior engineer and chief engineer in the Development Planning and System Operation divisions of TNB. In 1994, when TNB was instructed by the Government to set up its own university, Dr. Amir was one of those several engineers from TNB who were entrusted to the university project and was made the Founding Dean of College of Engineering, Universiti Tenaga Nasional (UNITEN). When TNB Research Sdn. Bhd. (another subsidiary of TNB and located next to UNITEN), and its associated laboratories were being set up at about the same time as UNITEN, Ir. Dr. Amir was then assigned to TNB Research as its General Manager and later became its Managing Director from 1998 -2002. He was then assigned again to UNITEN as the Dean of College Graduate Studies/Professor of Power Engineering Centre until his retirement from TNB in 2007.

From 2008, he joined Minconsult Sdn. Bhd. as the Senior Consultant/General Manager leading/assisting teams that were involved in power system projects, such as power generating plants, electric traction railway projects (LRT/MRT and KTMB), renewal energy projects (large-scale FIT Solar PV projects, mini-hydros), Management & Engineering Audits of electricity supply industry and formulation of Feasibility Study Reports/Master Plan Study Reports related to Energy/Electricity Planning. In 2013, he was appointed by University Malaysia Perlis (UniMAP) as the Visiting Professor at the School of Electrical Engineering Systems.

Ir. Yau Chau Fong
Chairman
Electrical Engineering Technical Division, IEM

ANNOUNCEMENTS TO NOTE:

- Preferential admission to talk shall be accorded to IEM members (pre-registration and online registration are NOT required). Telephone and/or fax reservation will NOT be entertained.
- **Non members** may also attend the talk but will need to pay a registration fee of **RM50** and an administration fee of **RM15**. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.
- **IEM members who fail to produce their membership cards will be charged a fee of RM25.00. GST is inclusive.**

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

CPD HOURS CONFIRMATION

Name :

Membership No:

Signature: